Selecting an Internet Service Provider

Adapted by Chris Shaffer, Internet Coordinator, with permission from NN/LM Pacific Northwest Region's "Selecting an Internet Service Provider" http://nnlm.nlm.nih.gov/prn/etc/isp.html

An Internet Vocabulary Lesson

Basic access to the Internet used to mean the three essential services: email, telnet, and FTP. Now, it also includes news and the Web. The Internet is an international network of computer networks. Computer networks are elaborate technologies for exchanging data between individual computers. While the details may vary, virtually everything on the Internet is accomplished through these network building blocks:

Email: The ability to transmit messages to other Internet users. Most users begin their Internet habits by exchanging messages with friends and co-workers.

News: The ability to participate in discussion groups on many topics.

Telnet: The ability to log in to computers all over the world and use programs on them. Telnet is often used to search library catalogs, and can be used to access DOCLINE .

FTP: File Transfer Protocol, the ability to copy files from remote computers.

Web: The ability to view Web sites and access email, news, telnet, and FTP resources by using a browser like Mosaic, Netscape, or Explorer. The World Wide Web's hypermedia is quickly becoming the most popular Internet service.

As you shop for an Internet Service Provider (ISP), identify which Internet services you need and include them in your list of expectations for your ISP. You should consider only those ISPs which provide, at a minimum, the basic Internet services. Consider, for example, how you want to do email. If there is already an email system at your institution, your information systems department may be able to provide a gateway to the Internet. Many ISPs support popular email programs. If you want to use a specific email program like Eudora, include it in your list of Internet needs. Once you specify your Internet expectations, you must decide whether to purchase a remote account, a SLIP or PPP account, or a direct connection to the Internet.

Remote Accounts give you an account on a host computer system that can provide a variety of Internet services, including text, but not graphic, Web access. Often the host will be a Unix computer with hundreds of other users; these accounts are sometimes called shell accounts, because they give you access to a Unix shell. The resources required to access a remote account are relatively modest. You need a computer with telecommunications software that can perform VT-100 emulation, a modem, and a plain telephone line. Many libraries have existing systems that will work well for remote accounts. Faster computers and faster modems are better, but not required.

SLIP and PPP Accounts (Serial Line Internet Protocol and Point-to-Point Protocol) are personal Internet connections that use modems and phone lines. However, unlike the remote accounts discussed above, SLIP and PPP provide direct access to the Internet. You get virtually all the benefits of being on the network, but often at a slower speed than direct connections. The term "bandwidth" is often used here: SLIP and PPP give less bandwidth than, for example, Ethernet. Graphic applications like Mosaic and Netscape can perform sluggishly even on rela-

tively high-bandwidth connections. If you run them over SLIP or PPP, you may find yourself getting sluggish, too. If you pursue this option, you will need at least a 14.4 KB modem — even better, go for a new 28.8 KB or faster modem, available for $200 or less. SLIP and PPP connections are widely available.

Direct Connections provide full access to Internet services. A direct connection requires more resources than a remote account: a faster, smarter computer connected to a network. This network, in turn, connects to the Internet. Getting local area networks (LANs) to talk to the Internet is not a trivial job. LANs use any one of several wiring schemes (e.g., Ethernet, LocalTalk, token ring). Connecting LANs to the Internet usually involves the use of a special phone line, often called a dedicated or leased line. These lines make it possible to send digital information between networks via services with names such as frame relay, ISDN, ATM, 56K, T1, and T3. If your institution needs this kind of access, educate yourself about the services and keep your systems administrators informed so that your needs will be considered when Internet access decisions are made.

Questions to Ask

Once you have done your homework to determine your needs, you should ask your potential ISPs about:

Reliability: Does the connection work at all hours of the day? Are there peak time overloads? Is there a refund for downtime? Does the connection support the speeds and types of hardware and software you want to use?

Troubleshooting: Is support part of normal service or an added cost? What are the hours of coverage for network operations? Is telephone support available via a local call, 800 number, or long distance?

Training/User Support: Is there technical help available via email and/or telephone? Are there help and manuals available online? Is there a user-friendly interface to Internet resources? What software is provided and/or required? Are Internet tools such as email, telnet, FTP, news, and Web browsers available?

Business Arrangements and References: Are free trial connections available? What local and 800 numbers are available for you to use? Can you access your account when travelling? Can multiple users access the same billing account simultaneously? Can multiple user IDs/mailboxes share the same billing account? Are there surcharges for any types of connections or particular hours of the day? What kind of contract or services agreement is required? What options are available for billing and payments? Is there a flat or fixed fee option? Discounts for pre-payments? Are there any options that will reduce (or increase) your costs? Are group discounts available? (Start your own group!) Are there charges for file storage? How long has the provider been in business? **Can you get answers to your questions in writing?** Ask for names of two to three similar users and check with them regarding their experience.

Many lists of Internet Service Providers are available, in print and on the Web. Two of the most popular are The List, at **http://www.thelist.com** and the Providers of Commercial Internet Access at **http://www.celestin.com/pocia**. Typically, these sites are searchable by state or area code. They also provide basic information on services and fees as well as contact information. If you are unable to access these lists, call your state outreach librarian for a list of providers in your area.